

**Claims as amended:**

Please cancel claims 1-24 without prejudice.

Please add the following new claims:

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25. (new) Method for formation of a panel for generating and diffusing heat, comprising the following steps:
- providing a board having one or two pieces of fabric with a weft of continuous, highly-conductive metal wire coated with insulating material and with a warp formed of parallel strips laid side by side, wherein said parallel strips are formed of fiberglass threads placed side by side;
- forming intermediate and external layers of thermoadhesive epoxy material in relation to the pieces of fabric;
- coating faces of the board with sheets of mica-based material;
- providing first electrical contacts at a short distance from ends of the metal wire, wherein said first electrical contacts are connected to a source of electric current;
- forming holes in the thermoadhesive epoxy insulating layer covering the faces of the board, wherein said holes extend to the insulating coating of the metal wire; and
- providing second electric contacts connected to the ends of the metal wire by welds inserted in the holes made in the thermoadhesive epoxy insulating layer and extending to the insulating coating of the metal wire.

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26. (new) The method according to claim 25, wherein the holes are made in the thermoadhesive layer by means of a laser beam, wherein said laser beam penetrates both the thermoadhesive epoxy layer and the insulating coating on the metal wire, and wherein the laser beam is repelled by the metal of the metal wire.

27. (new) The method according to claim 25, wherein the board is protected by means of a frame formed of two opposing halves.

28. (new) The method according to claim 25, wherein an electrothermal sensor is disposed substantially in a center of the board, wherein the sensor is connected to two ends of an interruption purposefully made in the metal wire, wherein said sensor maintains electrical connection with said metal wire and breaks an electric circuit when temperature of the board rises above a predetermined level.

29. (new) The method according to claim 25, wherein the sheets coating the board are made of micarta.

30. (new) The method according to claim 29, wherein the micarta is supported by a fiberglass fabric.

31. (new) The method according to claim 29, wherein the micarta is impregnated with polyester resins.

32. (new) The method as defined in claim 29, wherein the micarta is impregnated with epoxy resins.

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